

**WHAT IS CLAIMED IS:**

1. A device [10] comprising:
  - a controller [21];
  - a memory [22] coupled to the controller; and
  - an input interface [20] arranged to receive at least two event signals [11],  
wherein the controller is arranged to determine a global correlation for the at least  
two event signal over a first period of time, determine a local correlation for the at least  
two event signals over a second period of time which is shorter than the first period of  
time, determine a deviation between a local correlation vector and a global correlation  
vector, determine an average deviation from the deviation and determine whether an  
artifact was detected in one of the at least two event signals.
2. The device [10] according to Claim 1 wherein the device is a patient monitoring system.
3. The device [10] according to Claim 2 wherein the at least two event signals [11]  
are patient monitored data signals.
4. The device [10] according to Claim 3 further comprising an alarm indicator [40]  
coupled to the controller [21], the alarm indicator [40] being triggered if at least one of  
the event signals [11] crosses a preset threshold value and the controller [21] determines  
that no artifact was detected in the at least one event signal [11].
5. The device [10] according to Claim 1 further comprising a memory [22] for  
recording the at least two event signals [11].
6. The device [10] according to Claim 1, wherein the device is a server forming part  
of a client-server network.
7. A method [Fig. 2] for detecting a signal artifact in an event signal, the method  
comprising the steps of:

receiving at least two event signals;  
determining a global correlation for the at least two event signal over a first period of time;  
determining a local correlation for the at least two event signals over a second period of time which is shorter than the first period of time;  
determining a deviation between a local correlation vector and a global correlation vector;  
determining an average deviation from the deviation; and  
determining whether an artifact was detected in one of the at least two event signals based upon the average deviation.

8. The method [Fig. 2] according to Claim 1 wherein the method is used with a patient monitoring system.

9. The method [Fig. 2] according to Claim 8 wherein the at least two event signals are patient monitored data signals.

10. The method [Fig. 2] according to Claim 9 further comprising the step of providing an alarm indication if at least one of the event signals crosses a preset threshold value and no artifact was detected in the at least one event signal.

11. The method [Fig. 2] according to Claim 7 further comprising the step of recording the at least two event signals.

12. The method [Fig. 2] according to Claim 7, wherein the method is used in a server forming part of a client-server network.

13. A system [10] for detecting a signal artifact in an event signal [11], comprising:  
means [20] for receiving at least two event signals [11];  
means [21] for determining a global correlation for the at least two event signal over a first period of time;

means [21] for determining a local correlation for the at least two event signals over a second period of time which is shorter than the first period of time;

means [21] for determining a deviation between a local correlation vector and a global correlation vector;

means [21] for determining an average deviation from the deviation; and

means [21] for determining whether an artifact was detected in one of the at least two event signals based upon the average deviation.

14. The system [10] according to Claim 13 wherein the system is a patient monitoring system.

15. The system [10] according to Claim 14 wherein the at least two event signals [11] are patient monitored data signals.